

ABSTRACT

Laser beam radiating means has a center electrode at an inner periphery of an annular electrode. Center electrode potential control means controls potential of the center electrode so as to keep zero (0) or positive constant voltage, so that it is possible to absorb charged particles in plasma generating by radiation of laser beam through the center electrode, and dispersion of plasma can be restricted thereby. Even if a large volume of plasma is generated, a line of electric force from the annular electrode is not disturbed by plasma, and the variation of capacitance generating between the annular electrode and a workpiece can be prevented, thereby.